REMARKS

Claims 1-15

Claims 1-15 have been rejected under 35 USC 112, second paragraph as being indefinite.

Claim 1 has been amended to remove the "high" and "low" language, and provide a numerical basis which defines the scope of the claim. Particularly, the surface roughness is defined as Rq, which is a standard term in the art defined as the root mean square roughness. Rq is well know to be calculated by the following formula:

$$Rq = \left[\frac{1}{L} \int_0^L z^2 (x) \, dx \right]^{1/2},$$

where L is the length of the surface profile along the x-direction.

The digital equivalent of the foregoing equation is, as well known to those skilled in the art:

$$Rq = \left[\frac{1}{N} \sum_{i=1}^N z_i^2 \right]^{1/2}$$

where N is the number of data points in a measured surface profile.

The numerical value assigned to the surface roughness (Rq) is about 4.5 angstroms or more. The scale is defined as being a length along the disk surface, and correlates to L in the equation. Support for these amendments are found, for instance, on p. 2, lines 11-12, p. 6, lines 38-44 and p. 7, lines 1-7.

The surface microwaviness has been similarly defined as Wq, which is well known in the art to be the root mean square waviness. Support for this amendment is found, for instance, on p. 2, line 13, p. 6, lines 38-44 and p. 7, lines 1-7.

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The amendment to claim 1 is believed to adequately define the requisite surface waviness and roughness, and the distances or "scale" at which measurements are taken. Due to the amendments, one skilled in the art will reasonably be apprised of the scope of the invention.

Claims 9 and 15 have been amended in a manner similar to claim 1. For the same reasons, withdrawal of the rejection is respectfully requested.

Claims 6 and 7 have been canceled.

The preambles of claims 2-5, 8 and 10-14 have been amended to match the respective parent claim. Withdrawal of the rejection and examination of clams 2-5, 8 and 10-14 is respectfully requested.

Claims 1, 9 and 15

Claims 1, 9 and 15 have been rejected under 35 USC 102(e) as being anticipated by, or obvious under 35 USC 103(a) over, Takahashi et al. (US6852010).

Takahashi describes methods for forming a substrate, and so all properties disclosed therein refer to the surface of the substrate. Takahashi's substrate is the base layer for a recording medium, upon which a magnetic layer is formed. See Takahashi col. 1, lines 17-26, reproduced below:

> A magnetic disk is known as one of information recording media. The magnetic disk comprises a substrate and a thin film such as a magnetic layer formed thereon. As the substrate, use has been made of an aluminum substrate or a glass substrate. In recent years, in response to the demand for high-density recording, the glass substrate is used at an increasing ratio because a gap between a magnetic head (which is operable as a recording and/or reproducing head) and the magnetic disk can be small as compared with the aluminum substrate.

In sharp contrast, the present invention is directed to properties of the disk outer surface. It is the claimed properties, R_q and W_q, on the outer surface of the disk that create the

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beneficial combination of reduced likelihood of slider-disk contact and low probability of stiction. See p. 12, lines 12-21 of the present invention for these and other advantages provided by the claimed disk having an outer surface with the claimed properties.

Accordingly, because Takahashi only refers to the substrate of a medium, and not the outer surface, Takahashi fails to reach, disclose or suggest the claimed combination of surface microwaviness (Wq) and surface roughness (Rq) on an outer surface of the disk.

Reconsideration and allowance of claims 1, 9 and 15 is respectfully requested.

Claims 2-5 and 8 depend from claim 1, and therefore incorporate the limitations of claim 1. Accordingly, claims 2-5 and 8 are also believed to be allowable.

Claims 10-14 depend from claim 9, and therefore incorporate the limitations of claim 1. Accordingly, claims 10-14 are also believed to be allowable.

Allowance of claims 1-5 and 8-15 is respectfully requested.

Should the Examiner wish to discuss this matter further, the Examiner is invited to call the undersigned at (408) 971-2573. For payment of any fees due in connection with the filing of this paper, the Commissioner is authorized to charge such fees to Deposit Account No. 50-2587 (Order No. HSJ920030209US1).

Respectfully submitted,

By: _____   Date: ___6/29/05___
         Dominic M. Kotab
         Reg. No. 42,762

Zilka-Kotab, PC
P.O. Box 721120
San Jose, California 95172-1120
Telephone: (408) 971-2573
Facsimile: (408) 971-4660

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